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Detecting cancer, comprises measuring the expression level of cancer related polypeptides selected from a set of polypeptides given in the specification

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Patent Family (1 patents, 1 countries)

Patent Application

Number	Kind	Date	Number	Kind	Date	Update
JP 2004049122	A	20040219	JP 2002211830	A	20020719	200422 B

Priority Applications (no., kind, date): JP 2002211830 A 20020719

**Patent Details**

Number	Kind	Lan	Pg	Dwg	Filing Notes
JP 2004049122	A	JA	116	6	

**Alerting Abstract JP A**

NOVELTY - Detecting (M1) cancer, involves measuring the expression level of a polypeptide (I) encoded by a DNA (II) having a sequence chosen from 119 fully defined sequences such as 416, 265, 450, 376, 360, 245, 290, 288, 221, 391 nucleotides etc., as given in the specification, or a DNA that hybridizes to the above DNA under stringent conditions.

DESCRIPTION - INDEPENDENT CLAIMS are also included for:

- 1.a diagnostic (III) of cancer which contains an oligonucleotide that hybridizes to (II) and that has chain length of at least 15 nucleotides, or which contains an antibody that specifically binds with (I);
- 2.a DNA (IV) which encodes a cytotoxic protein and is coupled with a functional promoter region of (II);
- 3.a vector (V) having (IV) inserted in it;
- 4.a transformed cell (VI) containing (V);
- 5.evaluating (M2) the presence or absence of anticancer activity in a test sample, by contacting a test sample with a cancer cell, preparing cRNA or cDNA sample from the cancer cell contacted with the test sample, providing a substrate having fixed on it a number of DNA among (II) and a nucleotide probe that hybridizes with it, contacting the substrate and the sample, and measuring the expression level of a number of DNA contained in the cRNA or cDNA sample by detecting the intensity of hybridization between the sample and probe, where when the expression level of the DNA when contacted with test sample recovers to the expression level in a control that is not contacted with the test sample, then the test sample is considered to have anticancer activity; and
- 6.producing a composition, by mixing a sample evaluated by (M2) and a carrier.

ACTIVITY - Cytostatic.

No biological data given.

**MECHANISM OF ACTION - Gene therapy.**

USE - (M1) is useful for detecting cancer. (V) is useful for treating cancer by gene therapy. (M2) is useful for screening a sample for anticancer activity which involves evaluating anticancer activity in a number of test samples by (M2), and selecting the sample having anticancer activity (claimed).

ADVANTAGE - (M1) allows early detection of cancer.

**Technology Focus**

BIOTECHNOLOGY - Preferred Method: (M1) involves preparing polypeptide, RNA, or cDNA sample from the subject, measuring quantity of (I), RNA, or cDNA which encodes (I) contained in this sample, and comparing the measured quantity with a control. (M1) involves preparing cRNA or cDNA sample from the subject, providing a substrate on which a nucleotide probe that hybridizes with (II) is fixed, contacting the substrate with the sample, measuring expression level of (II) contained in the sample by detecting the intensity of hybridization between the probe and the sample, and comparing the measured expression level with a control. (M1) involves measuring expression level of polypeptide encoded by a number of DNA among (II), by preparing cRNA or cDNA sample from the subject, providing a substrate with number of DNA among (II) and nucleotide probe that hybridize with it, contacting the substrate and the sample, measuring expression level of number of DNA contained in the cRNA or cDNA sample by detecting the intensity of hybridization between the sample and probe, and comparing the expression level with a control.

Preferred Diagnostic: The cancer is lung cancer which is a small cellular lung cancer or is squamous cell carcinoma, adenocarcinoma or carcinoid.

**Title Terms /Index Terms/Additional Words:** DETECT; CANCER; COMPRISE; MEASURE ; EXPRESS; LEVEL; RELATED; SELECT; SET; SPECIFICATION

**Class Codes**

International Classification (Main): C12N-015/09  
(Additional/Secondary): A61K-031/711, A61K-045/00, A61K-048/00,  
A61P-035/00, C12M-001/00, C12M-001/34, C12N-001/15, C12N-001/19,  
C12N-001/21, C12N-005/10, C12Q-001/68, G01N-033/53, G01N-033/566,  
G01N-033/574

File Segment: CPI; EPI

DWPI Class: B04; D16; S03

Manual Codes (EPI/S-X): S03-E14H4

Manual Codes (CPI/A-M): B04-E03F; B04-E05; B04-E08; B04-F0100E; B04-G01;  
B04-G21; B04-G22; B11-C07A; B11-C08E1; B11-C08E5; B11-C08E6; B11-C10;  
B12-K04A1; B12-K04E; B12-K04F; B14-H01; B14-S03; D05-H08; D05-H09;  
D05-H10; D05-H11; D05-H12E; D05-H14

**Chemical Indexing**

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**Japan**

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\*\*GENE EXHIBITING DISEASE TYPE-SPECIFIC CHANGE IN EXPRESSION IN VARIOUS TYPES OF CANCER, AND UTILIZATION THEREOF\*\*

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